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TRAFFIC IMPACT ANALYSIS

LOS COCHES SELF STORAGE

S04-009, ER 04-14-004

County of San Diego, California

October 23, 2006

LLG Ref. 3-04-1409

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TRAFFIC IMPACT ANALYSIS
LOS COCHES SELF STORAGE
SAN DIEGO COUNTY, CALIFORNIA

October 23, 2006

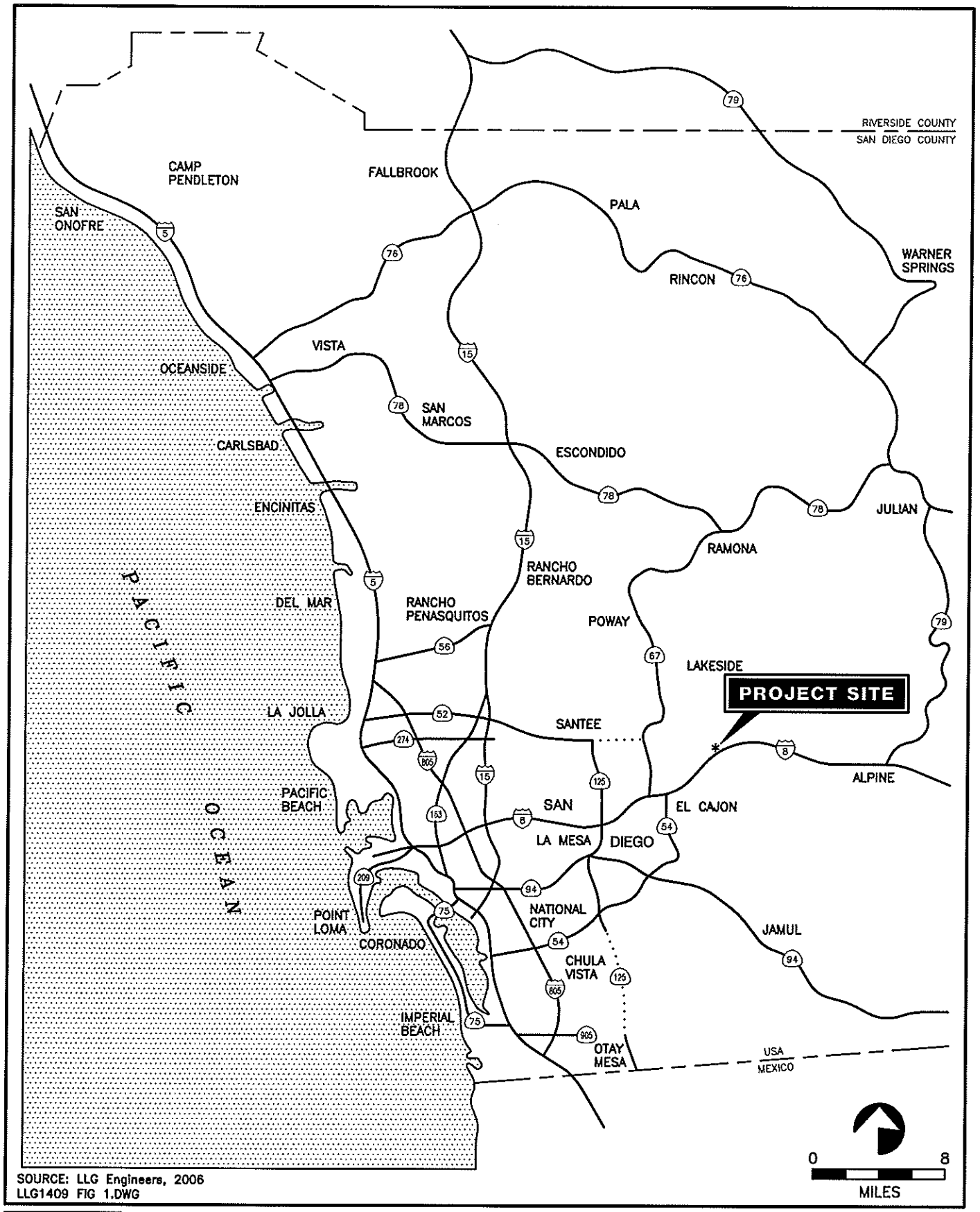
1.0 Introduction

The following traffic study has been prepared to determine and evaluate the traffic impacts on the local circulation system due to the development of the Blossom Valley Self Storage Units. The project is proposing to develop 700 self-storage units located on the north side of Business Route 8 west of Los Coches Road in the County of San Diego.

Included in this traffic study are the following:

- Project description;
- Existing conditions description;
- Project trip generation/distribution/assignment;
- Cumulative projects discussion;
- Significance criteria;
- Analysis methodology;
- Near-term intersection and street segment capacity analyses;
- Significance of impacts/Mitigation measures.

Figure 1 shows the general location of the project, while **Figure 2** shows a more detailed project area map.



SOURCE: LLG Engineers, 2006
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Figure 1

VICINITY MAP

LOS COCHES SELF STORAGE

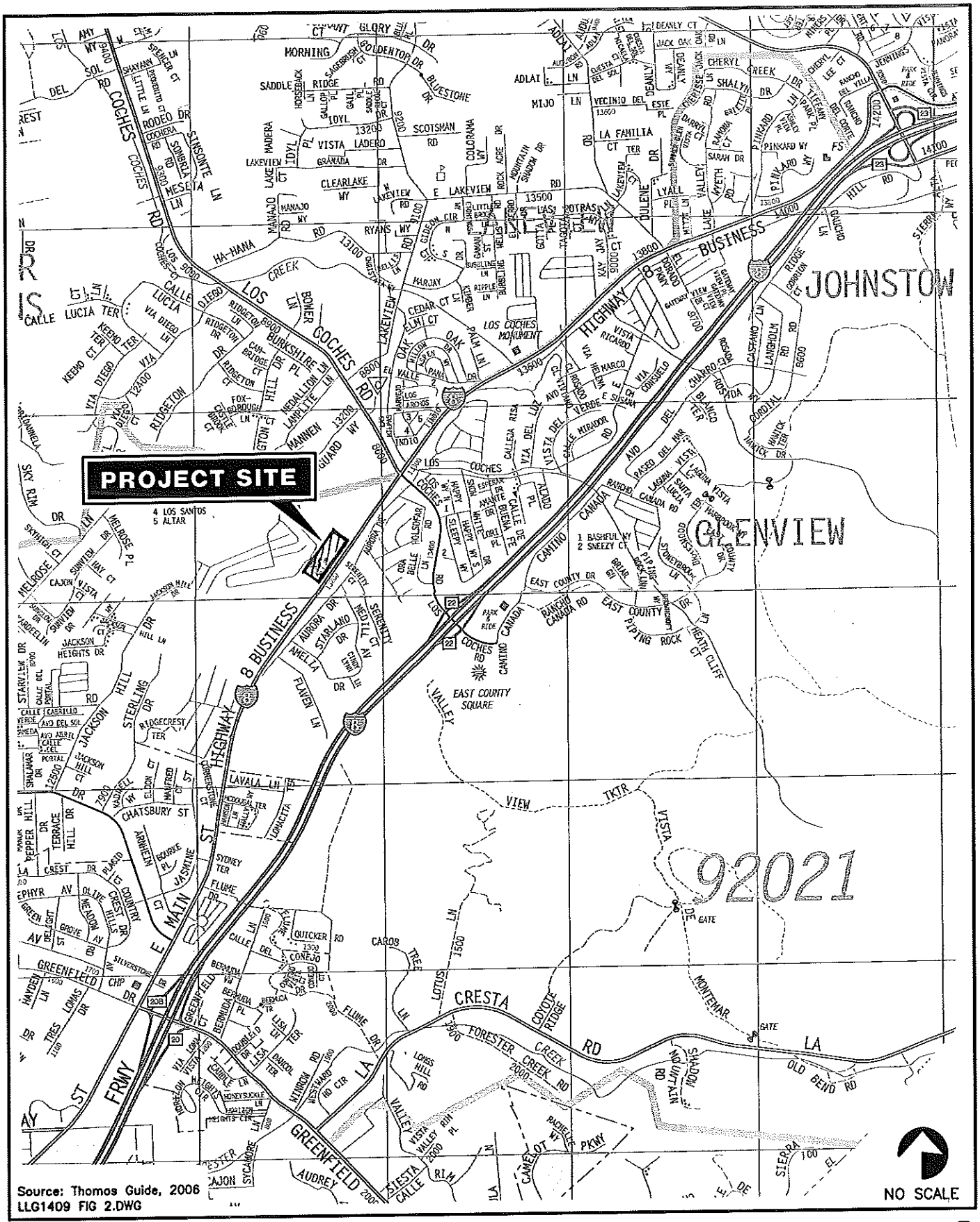

Figure 2

PROJECT AREA MAP

LOS COCHES SELF STORAGE

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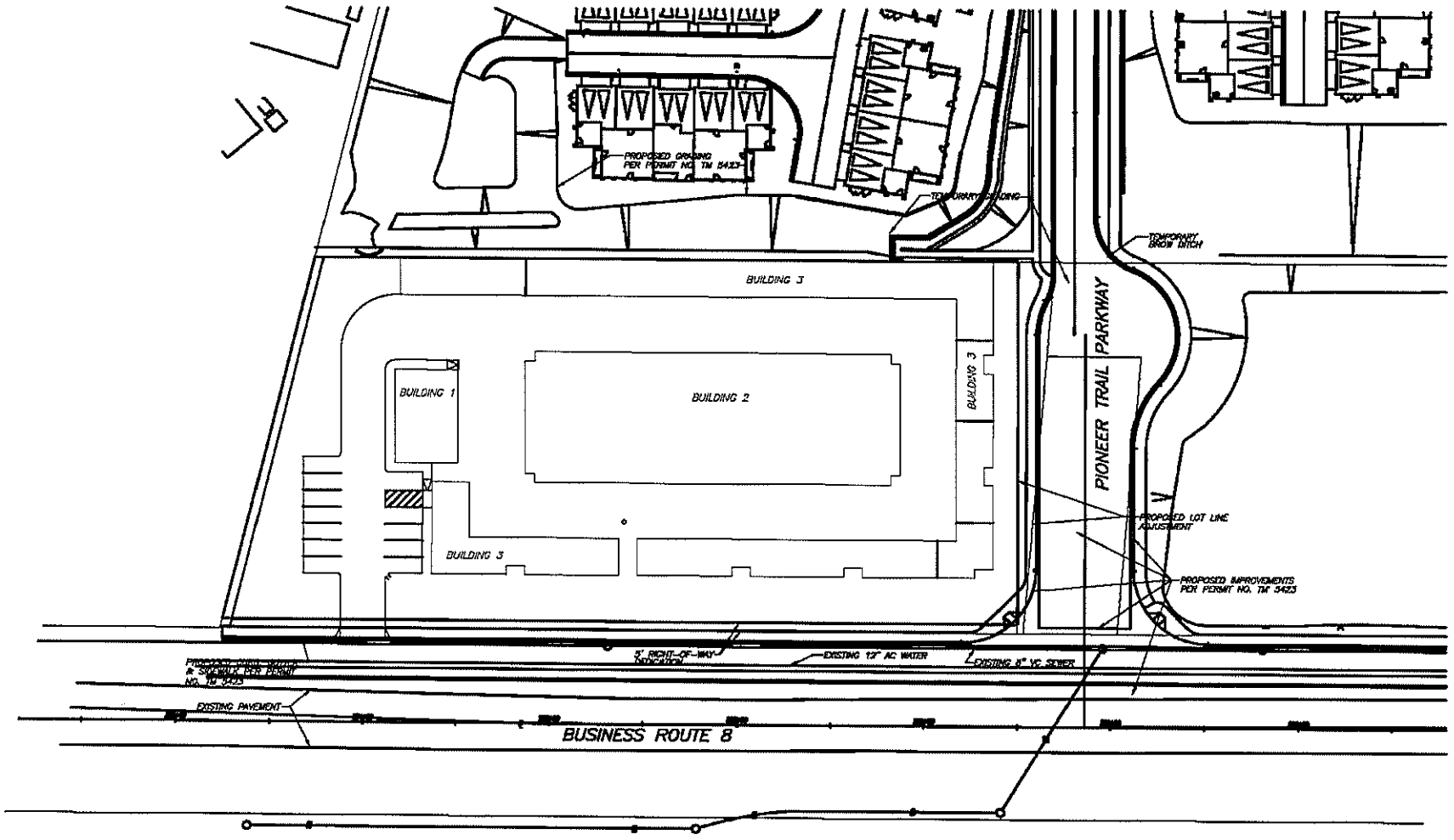
2.0 Project Description

The proposed project is proposing to develop a 700-unit self-storage complex. The project is located on the north side of Business Route 8 between Aurora Drive and Los Coches Road. The project is proposing access via one (1) project constructed driveway to Business Route 8. The project driveway will be constructed along the southwest portion of the site. In addition, the project will provide 12 on-site parking spaces (2-handicap and 10 regular stalls) per County requirements. **Figure 3** shows the conceptual site plan. As shown on Figure 3, Pioneer Trail Parkway will not provide access to the project site. The project's driveway is located approximately 350 feet west of Pioneer Trail Parkway. Pioneer Trail Parkway will provide access to the TM 5423 and TM 5306 subdivisions to Business Route 8.



Source: R.E.C. Engineers, 2006
LLG1409 FIG 3.DWG

NO SCALE

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Figure 3

SITE PLAN

LOS COCHES SELF STORAGE

3.0 Existing Conditions

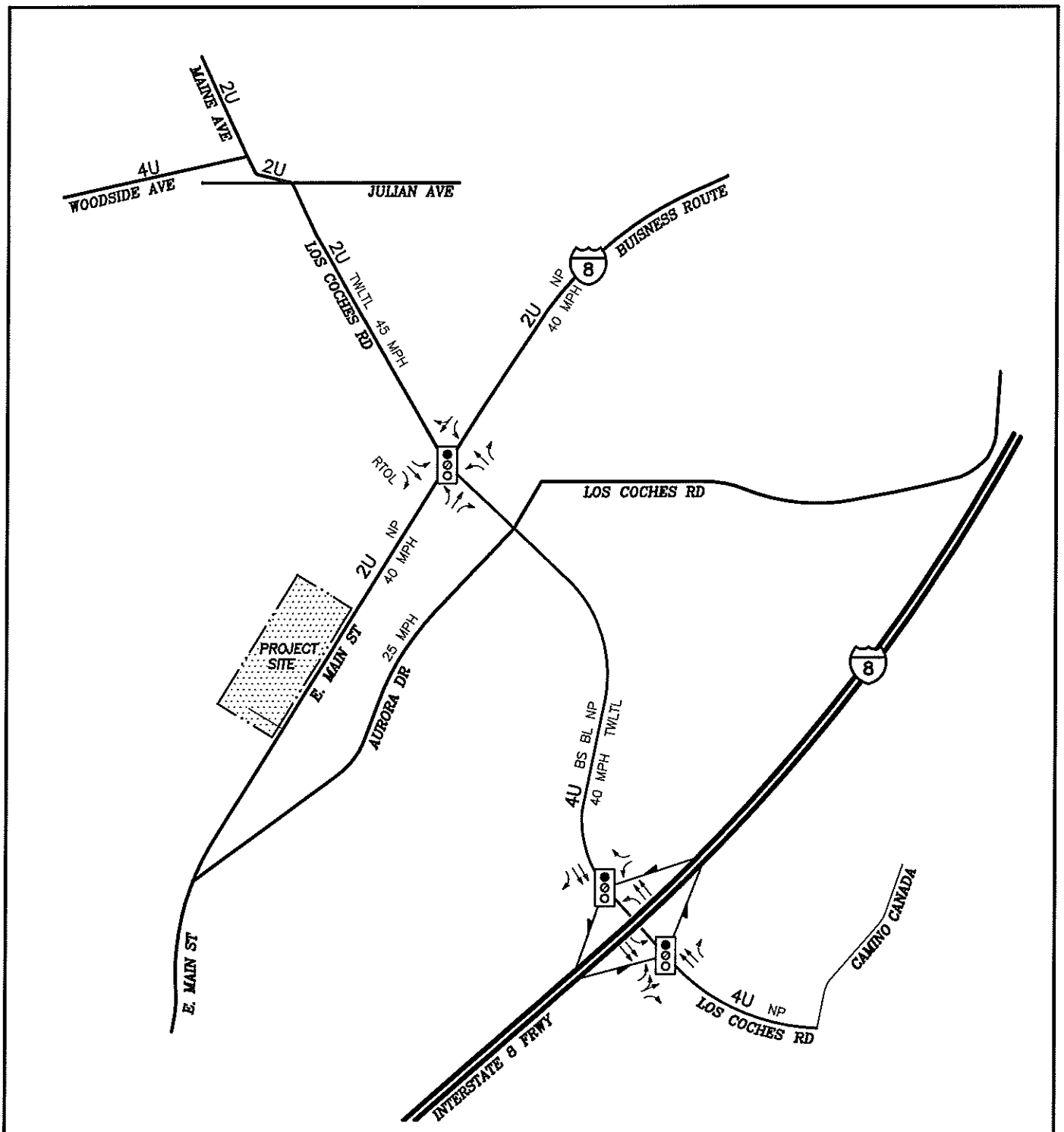
3.1 Existing Street System

The following is a brief description of the existing street system in the project area. **Figure 4** shows an existing conditions diagram.

Business Route 8 is classified as a Major Road on the County of San Diego Circulation Element. Business Route 8 is currently built as a two-lane undivided roadway in the project vicinity. There are no curbs, gutters, or sidewalks provided, parking is prohibited, and the posted speed limit is 40 mph. The current road is constructed with 40-feet of pavement.

Los Coches Road is classified as a Prime Arterial from Interstate 8 to Business Route 8 and a Major Road from Business Route 8 to Lakeview Road on the County of San Diego Circulation Element. Los Coches Road is currently constructed as a three-lane undivided roadway from Interstate 8 to Business Route 8 and a two-lane undivided roadway from Los Coches Road to Lakeview Road. Curbs, gutters, and sidewalks are provided intermittently and the posted speed limit is 45 mph. Parking is not permitted on Los Coches Road in the project vicinity.

Aurora Drive is an unclassified roadway on the County of San Diego Circulation Element. Aurora Drive intersects with Los Coches Road just south of Business Route 8 and continues west to intersect with Business Route 8 about half a mile down the road. Aurora Drive is currently constructed as a two-lane undivided roadway with a posted speed limit of 25 mph. There are no curbs, gutters, or sidewalks provided and parking is prohibited.



LEGEND

- Traffic Signal
- BL – Bike Lane
- BS – Bus Stop
- NP – No Parking
- 2U – Two-lane undivided roadway

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NO SCALE

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Figure 4

EXISTING CONDITIONS DIAGRAM

LOS COCHES SELF STORAGE

3.2 Existing Traffic Volumes

Average Daily Traffic (ADT) volumes were obtained from counts commissioned in January 2005 and 2006.

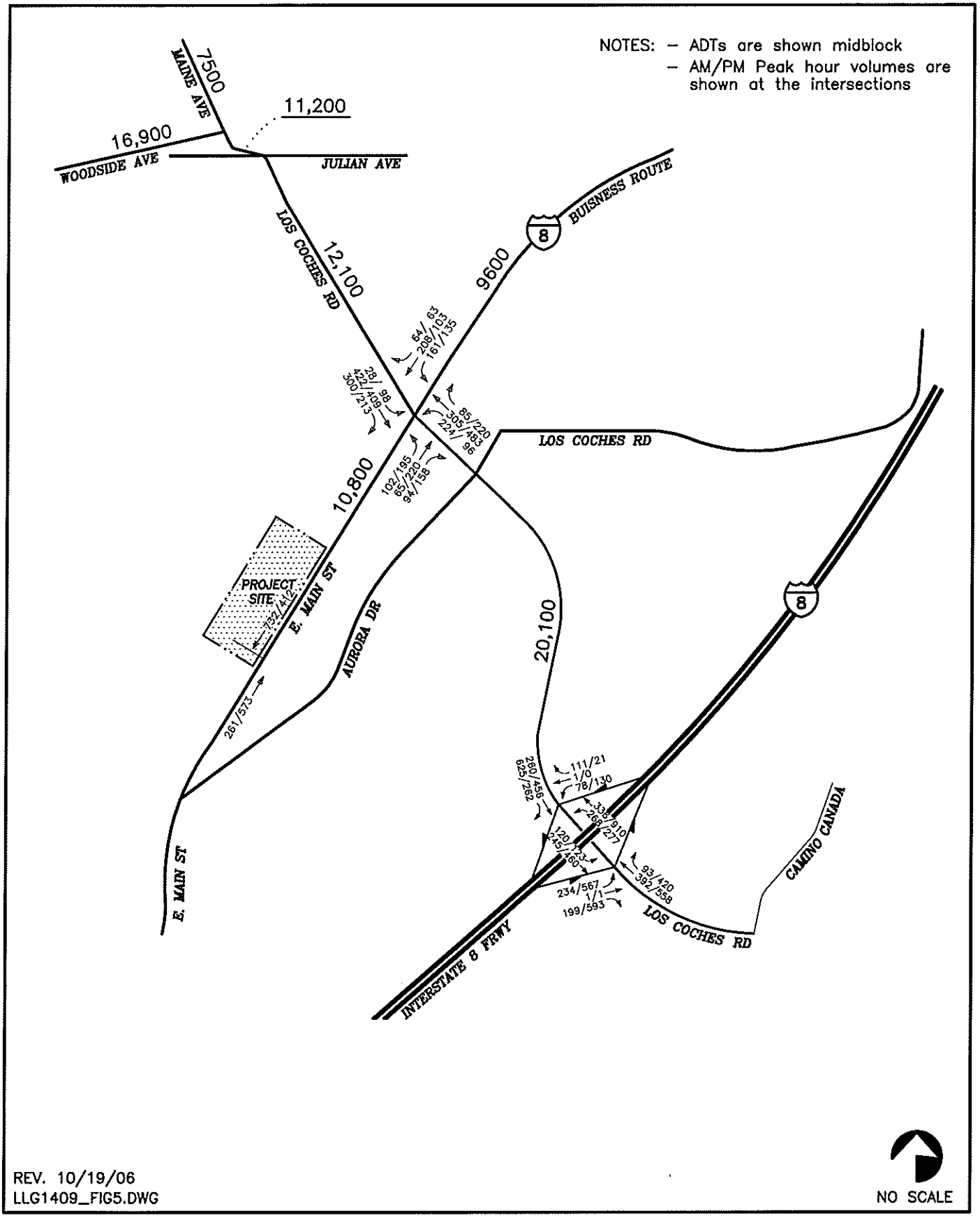
TABLE 1
EXISTING ADT VOLUMES

Street Segment	Date	ADT[a]
Woodside Avenue		
West of Los Coches Road	2006	16,900
Maine Avenue		
North of Woodside Avenue	2006	7,500
Los Coches Road		
Woodside Avenue to Julian Avenue	2006	11,200
Julian Avenue to Business Route 8	2005	12,100
Business Route 8 to I-8	2005	20,100
Business Route 8		
Aurora Drive to Los Coches Road	2005	10,800
East of Los Coches Road	2005	9,600

Footnotes:
a. Average Daily Traffic.
b. LLG - Linscott, Law & Greenspan Engineers commissioned counts.

Weekday AM/PM peak hour intersection turning movement volume counts at the Los Coches Road/Business Route 8 intersection were conducted by LLG on Thursday, April 22, 2004. The peak hour counts were conducted between the hours of 7:00-9:00 AM and 4:00-6:00 PM.

Appendix A contains the manual count sheets. **Figure 5** shows the existing ADTs and AM/PM peak hour turning movement volumes at the key intersections.



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NO SCALE

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Figure 5

EXISTING TRAFFIC VOLUMES AM/PM PEAK HOUR VOLUMES

LOS COCHES SELF STORAGE

4.0 Project Traffic

4.1 Project Traffic Generation

Trip rates from the SANDAG 'Brief Guide of Vehicular Traffic Generation Rates', April 2002, were utilized to determine the traffic generated by the project. SANDAG Rates state that 0.2 trips per storage unit are generated on a daily basis. **Table 2** shows the forecasted trip generation for the project.

TABLE 2

PROJECT TRIP GENERATION

USE	SIZE	DAILY TRIP ENDS (ADT)		AM PEAK HOUR				PM PEAK HOUR			
		RATE	VOLUME	% OF ADT	IN:OUT SPLIT	VOLUME IN	VOLUME OUT	% OF ADT	IN:OUT SPLIT	VOLUME IN	VOLUME OUT
Self Storage	700 Storage Units	0.2 /Unit	140	6%	50% 50%	4	4	9%	50% 50%	6	6

Rate for self storage was used from the SANDAG publication "Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region"

As seen in Table 2, it is calculated that the proposed project will generate 140 ADT, with 4 inbound and 4 outbound trips during the AM peak hour, and 6 inbound and 6 outbound trips during the PM peak hour.

It should be noted that if the project makes any changes to the site uses as identified above, the project will be conditioned to provide an updated traffic impact study.

4.2 Project Traffic Distribution /Assignment

The project-generated traffic was distributed and assigned to the street system based on the project access points, characteristics of the roadway system, the location of freeway access points, and the location of residential developments.

Figure 6 shows the estimated regional traffic distribution for the proposed project. **Figure 7** shows the assignment of project traffic to the local street system based on this distribution. **Figure 8** shows the existing + project traffic volumes.

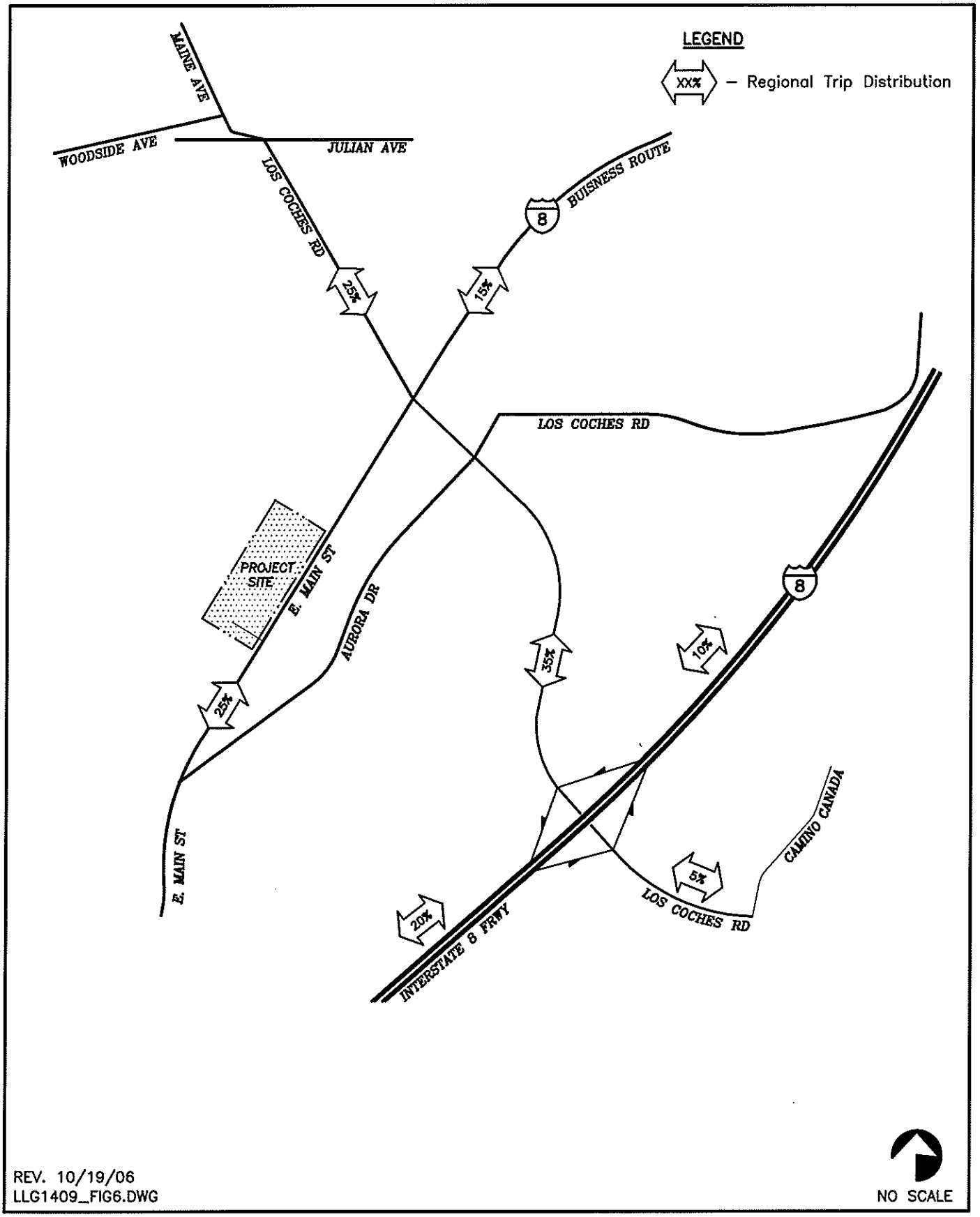

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Figure 6

REGIONAL TRAFFIC DISTRIBUTION

LOS COCHES SELF STORAGE

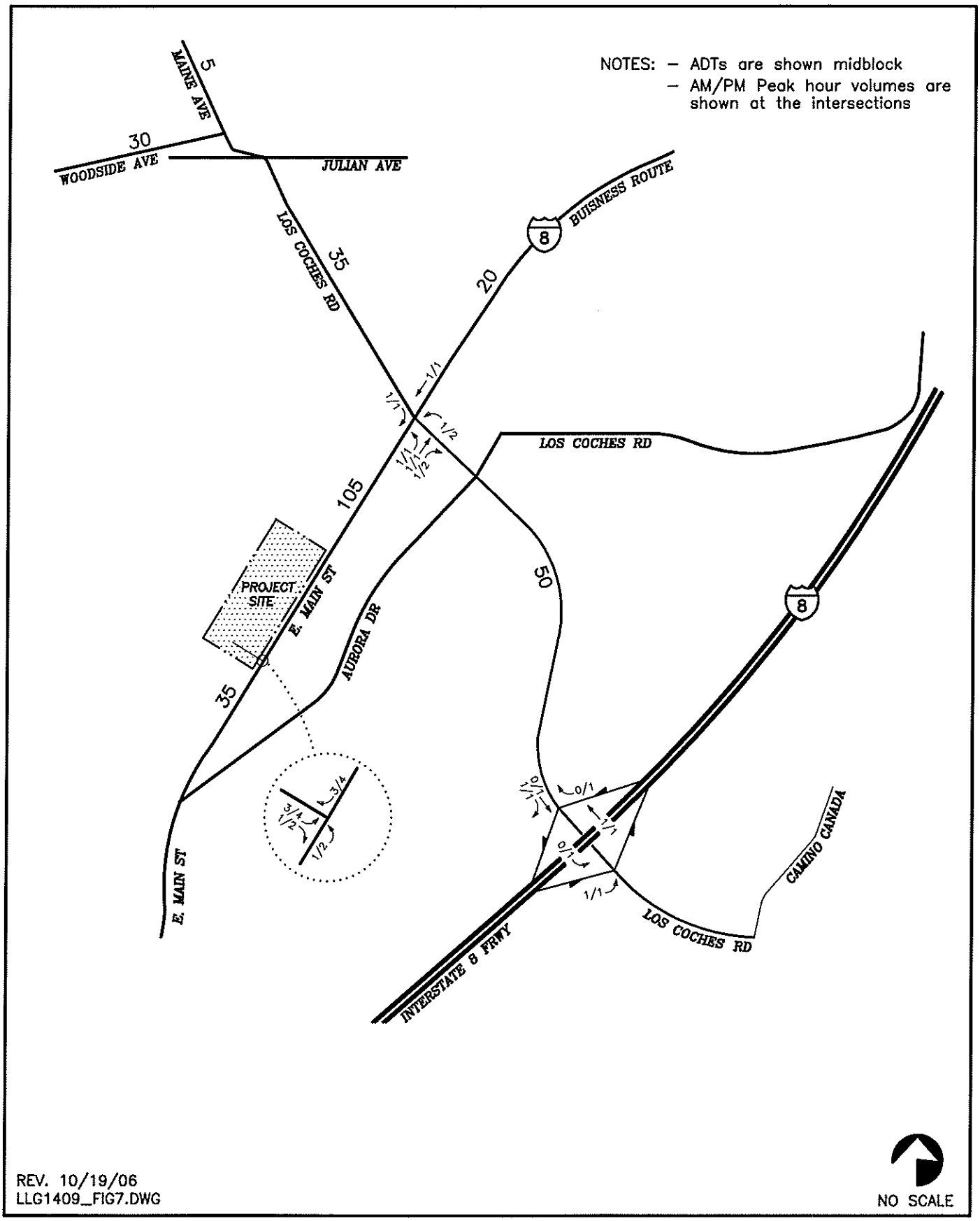

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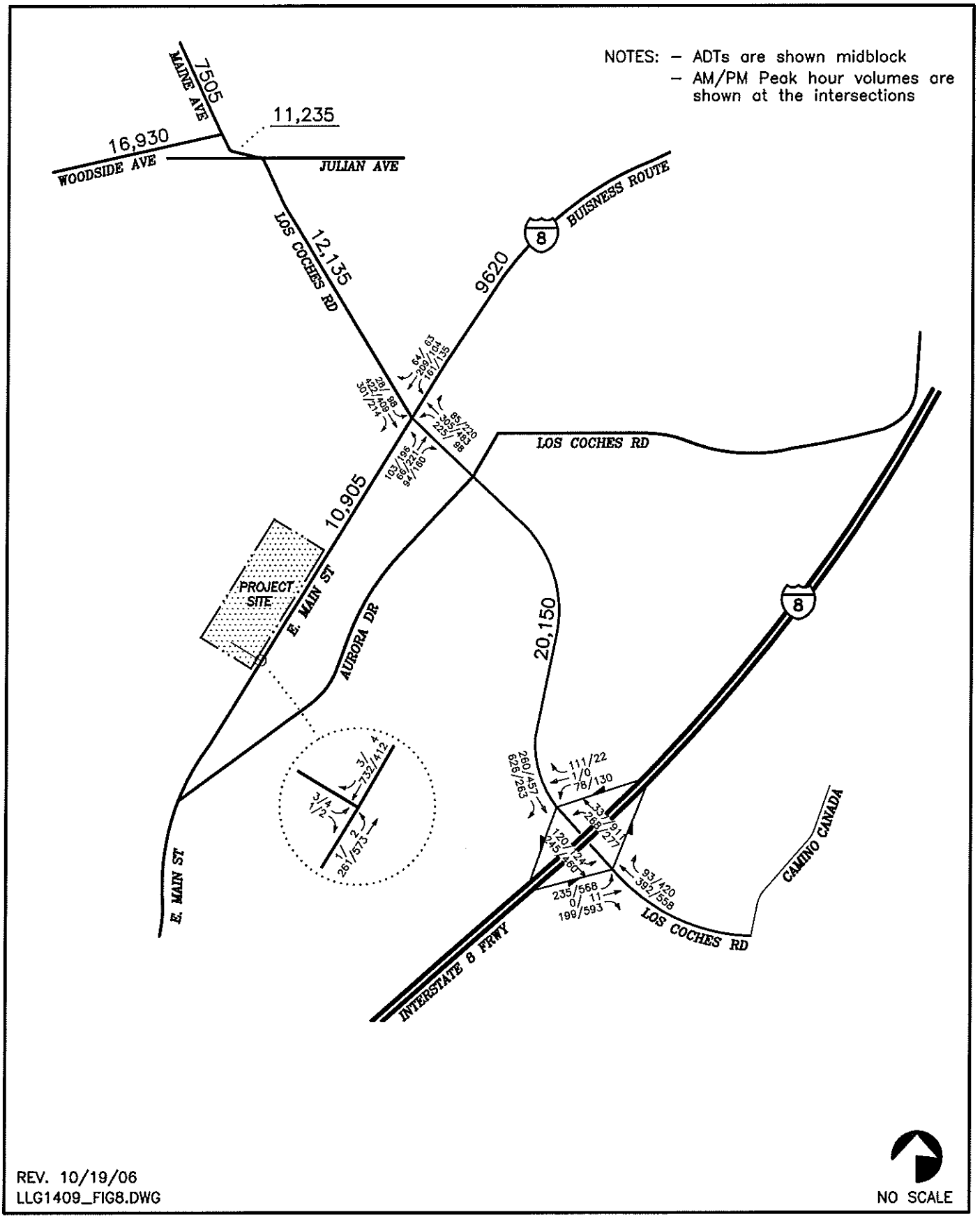
Figure 7

TOTAL PROJECT TRAFFIC VOLUMES AM/PM PEAK HOUR VOLUMES

LOS COCHES SELF STORAGE



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NO SCALE

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Figure 8

EXISTING + PROJECT TRAFFIC VOLUMES AM/PM PEAK HOUR VOLUMES

LOS COCHES SELF STORAGE

5.0 Cumulative Projects

There are other projects in the nearby area that will add traffic to the roadways and intersections in the study area. Based on research conducted during visits to the County of San Diego Projects Processing Department, thirty cumulative development projects were identified for inclusion in this traffic study. The following is a list of these projects.

1. **TM 4811 Subdivision** is a proposed 6-unit single-family housing development on 2 acres. The project is proposed to be located on the west side of Los Coches Road between Leyendekker Road and Del Sol Road. This project is calculated to generate 60 ADT with 1 inbound and 4 outbound trips during the AM peak hour and 4 inbound and 2 outbound trips during the PM peak hour. Traffic data for this project was manually derived from the SANDAG 'Brief Guide of Vehicular Traffic Generation Rates', April 2002 for single-family homes.

2. **TM 4771 Subdivision** is a proposed housing development consisting of 113 single-family residences located east of Winter Gardens Boulevard with access being via Gay Rio Drive. This project is calculated to generate 1,130 ADT with 27 inbound and 63 outbound trips during the midday peak hour and 79 inbound and 34 outbound trips during the PM peak hour. Traffic data utilized for this project was obtained from a traffic study prepared by Federhart & Associates in June 2000.

3. **Team TMP** is a proposed single-family residential subdivision. The project proposes to construct 4-single family homes located on Topa Hill Circle, west of Prospect Avenue within the community of Winter Gardens.

4. **GA Development Minor Subdivision** is a proposed single-family residential subdivision. The project proposes to construct 4-single family homes located on Blossom Valley Road, east of Lake Jennings Road within the community of Lakeside.

5. **Crest Subdivision** is a proposed single-family residential subdivision. The project proposes to construct 4 single-family homes located on La Cresta Road within the community of Crest. Traffic data for this project was obtained from a traffic study completed by LLG in September 2005.

6. **Wilder 4+ lots @ Lakeside** is a proposed single-family residential subdivision. The project proposes to construct 4-single family homes located on La Familia Court, just east of Adlai Road within the community of Lakeside.

7. **Bridal Run TPM** is a proposed single-family residential subdivision. The project proposes to construct 3-single family homes located on Rodeo Drive east of Los Coches Road within the community of Lakeside.

8. **Cheryl Valley Estates** is a proposed single-family residential subdivision. The project proposes to construct 73-single family homes located on Lake Jennings Park Road east of Lake Jennings Road within the community of Lakeside.

9. **Smith & Butler Minor Subdivision** is a proposed single-family residential subdivision. The project proposes to construct 4-single family homes located on Rodeal Way, east of Gay Rio Drive within the community of Winter Gardens.

10. **Jolly Minor Subdivision** is a proposed single-family residential subdivision. The project proposes to construct 4-single family homes located on Rodeal Way, east of Gay Rio Drive within the community of Winter Gardens.

11. **Royal Heights Apartments** is a proposed multi-family residential subdivision. The project proposes to construct 120 multi-family units located on Royal Road, east of Winter Gardens Boulevard within the community of Winter Gardens.

12. **Trenfel Major Subdivision** is a proposed single-family residential subdivision. The project proposes to construct 11 single-family homes located on North First Street, east of Bradley Avenue within the County of San Diego.

13. **Goodman TM** is a proposed single-family residential subdivision. The project proposes to construct 1 single-family home located on the northwest corner of Adlai Road/Audubon Road within the community of Lakeside.

14. **Wise Minor Residential Subdivision** is a proposed single-family residential subdivision. The project proposes to construct 4 single-family homes located on Paradise Park Drive, west of Winter Gardens Boulevard within the community of Winter Gardens.

15. **Parnell TPM** is a proposed single-family residential subdivision. The project proposes to construct 2 single-family homes located on Single Oak Drive, south of Woodside Avenue within the community of Winter Gardens.

16. **Flaherty Replacement** is a proposed single-family residential subdivision. The project proposes to construct 1 single-family home located on Gardena Road, west of Winter Gardens Boulevard within the community of Winter Gardens.

17. **Shelia Street TM & Rezone** is a proposed single-family residential subdivision. The project proposes to construct 11 single-family homes located on Gardena Road, west of Winter Gardens Boulevard within the community of Winter Gardens.

18. **Windmill Senior Villas** is a proposed senior multi-family residential complex. The project proposes to construct 27 senior housing units located on Winter Gardens Boulevard, south of Lemon Crest within the community of Winter Gardens.

19. **Our Lady of Perpetual Help Church** project was completed in 2002. The project entailed the construction of a two-story 9,386 square foot family center, expansion of the existing parking lot, and the removal of some buildings. The church is located on the east side of Los Coches Road, within the community of Lakeside. Since the project has been completed, no project traffic was included.

20. **Lakeside Community Church** proposes to construct a 2,000 square foot modular building on the church site located at 9573 Los Coches Road within the community of Lakeside.

21. **Bacinett Tentative Parcel Map** is a proposed single-family residential subdivision. The project proposes to construct 11 single-family homes located on Gardena Road, west of Winter Gardens Boulevard within the community of Winter Gardens.

22. **TM 5306 Subdivision** is a proposed subdivision consisting of 72 single-family homes on 78.8 acres within the Community of Lakeside. The project site is situated at the terminus of Wellington Hill Drive. The existing site is currently undeveloped and access to and from the project site is proposed via Wellington Hill Drive only. The project is calculated to generate 860 ADT with 20 inbound and 50 outbound trips during the AM peak hour and 60 inbound and 25 outbound trips during the PM peak hour. Traffic data for this project was obtained from a traffic study completed by LLG in January 2006.

23. **Settler's Point Subdivision** is a proposed development of a 225-unit residential condominium subdivision located north of Business Route 8 and west of Los Coches Road in the community of Lakeside. Access is assumed via Business Route 8 only. This project is calculated to generate approximately 1,800 ADT with 29 inbound and 115 outbound trips during the AM peak hour and 126 inbound and 54 outbound trips during the PM peak hour.

24. **TPM 5246** is a proposed single-family residential subdivision. The project proposes to construct 15 single-family homes. The project site is located west of Winter Gardens Boulevard, south of Laurel Lee Lane and north of Sapota Drive in the community of Winter Gardens.

25. **TPM 20305** is a proposed single-family residential subdivision. The project proposes to construct 3 single-family homes. The project site is located east of Jackson Hill Drive between Pepper Drive and Royal Road in the County of San Diego.

26. **TPM 20775** is a proposed single-family residential subdivision. The project proposes to construct 2 single-family homes. The project site is located east of I-8, east of Greenfield Drive, and north of La Cresta Road in the County of San Diego.

27. **TPM 20644** is a proposed single-family residential subdivision. The project proposes to construct 3 single-family homes. The project site is located on Jackson Hill Drive in the County of San Diego.

28. **The El Cajon Home Depot** is a proposed home improvement warehouse. The project site is situated along the east side of East Main Street and south of Pepper Drive within the City of El Cajon. The existing site is currently undeveloped and access to and from the project site is proposed via three driveways to East Main Street. The project is calculated to generate approximately 8,000 ADT with 200 inbound and 200 outbound trips during the AM peak hour and 400 inbound and 400 outbound trips during the PM peak hour. Traffic data from this report was taken from the traffic report completed by "*RCE Traffic Engineering*" in July 2005.

29. **The Lake Jennings Village** is a proposed 192-unit Condominium project. The project site is situated along the east side of Lake Jennings Park Road and north of Business Route 8 within the County of San Diego. Currently, one commercial business and three existing residences with associated garages and outbuildings are on the proposed project site. The project is calculated to generate 1,500 ADT with 25 inbound and 98 outbound trips during the AM peak hour and 108 inbound and 46 outbound trips during the PM peak hour. Traffic data from this report was taken from the traffic report completed by "*Katz, Okitsu & Associates*" in September 2005.

30. **TPM 20371** is a proposed single-family residential subdivision. The project proposes to construct 4 single-family homes on 1.2 acres. The project site is located along Wintergardens Drive and west of I-8 in the community of Winter Gardens.

Figure 9 shows the total assignment of cumulative project traffic. **Figure 10** shows the existing + project + cumulative traffic volumes. **Appendix B** contains the individual cumulative project traffic data.

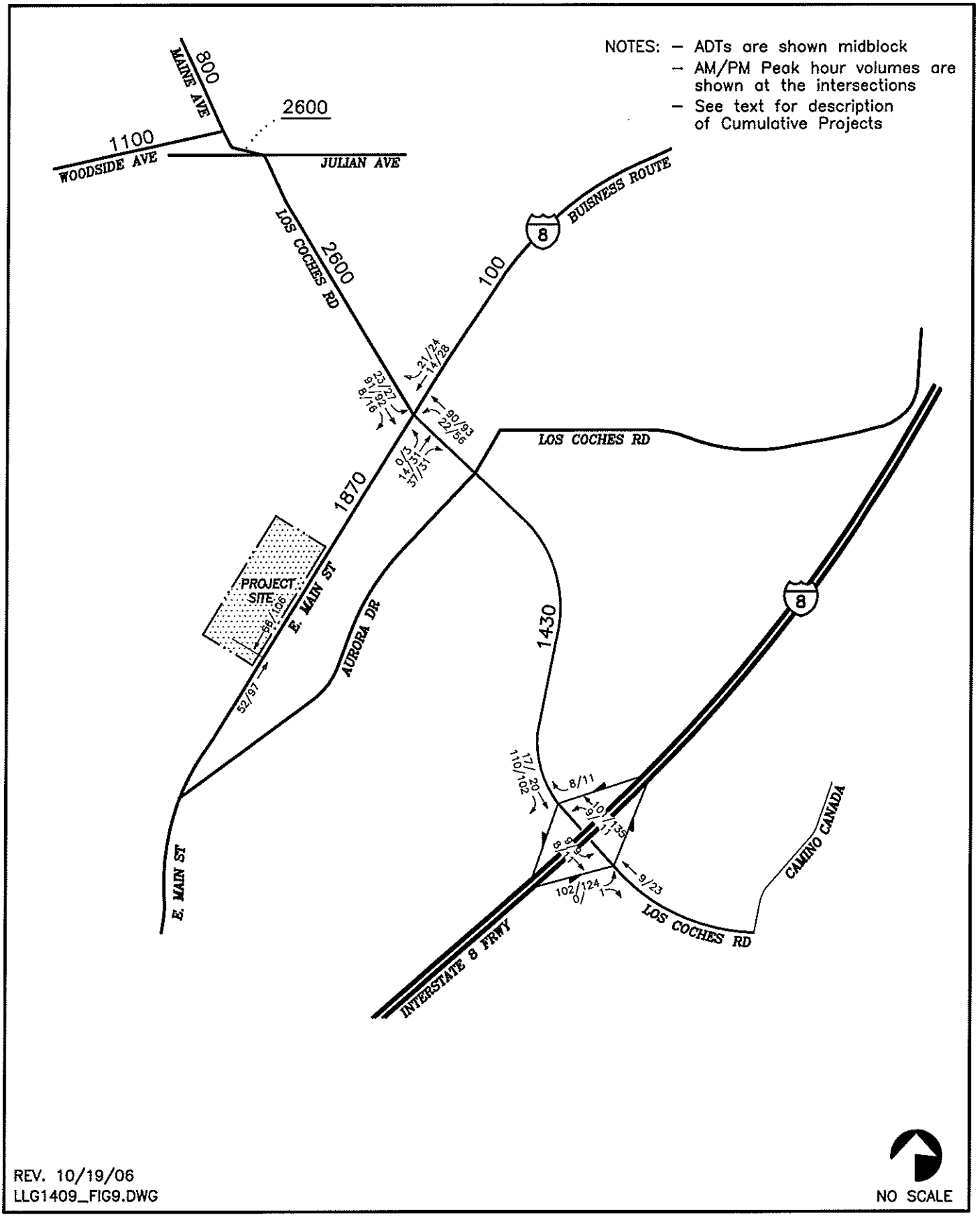

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Figure 9

TOTAL CUMULATIVE TRAFFIC VOLUMES AM/PM PEAK HOUR VOLUMES

LOS COCHES SELF STORAGE

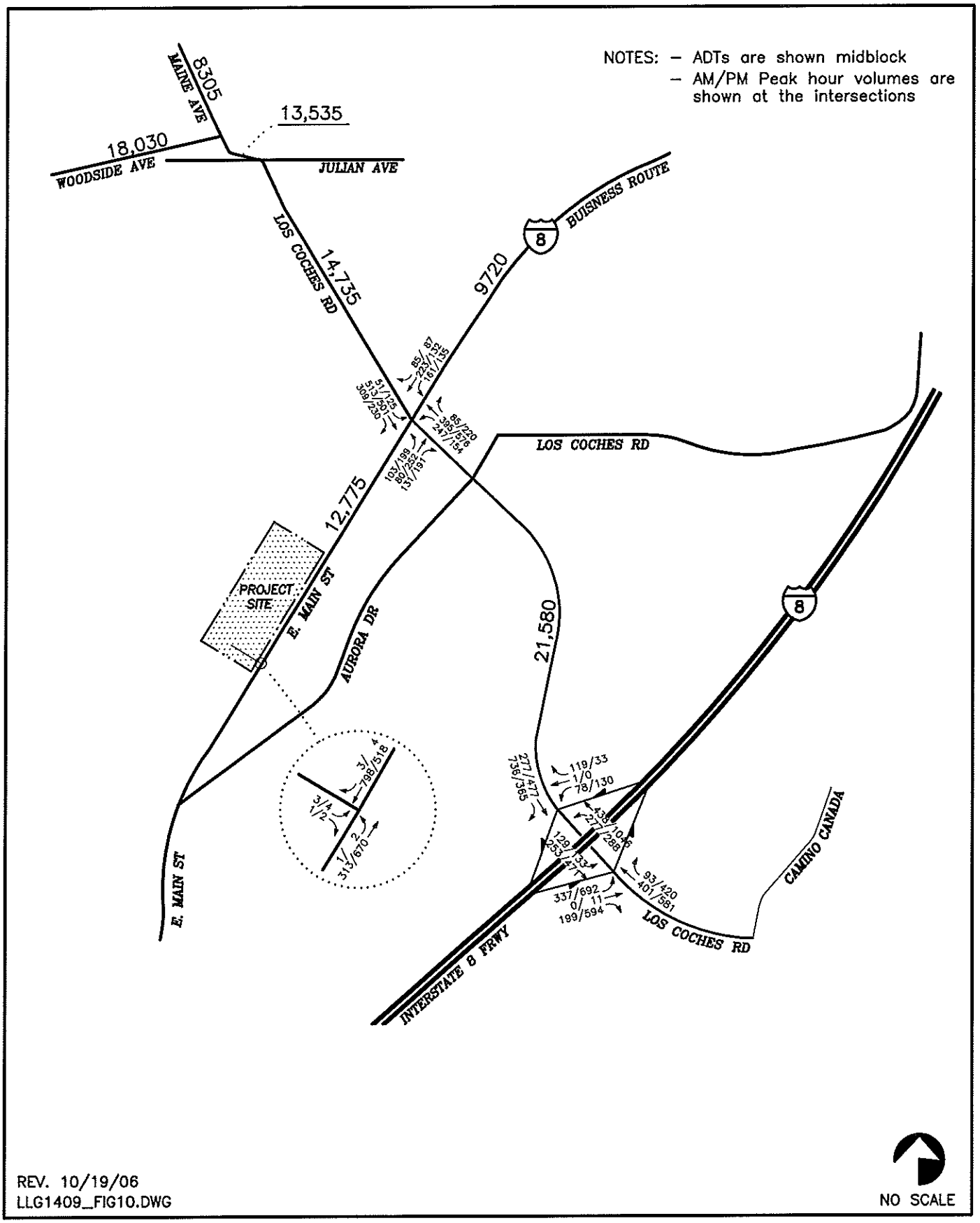

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Figure 10

EXISTING + PROJECT + CUMULATIVE PROJECTS TRAFFIC VOLUMES AM/PM PEAK HOUR VOLUMES

LOS COCHES SELF STORAGE

6.0 Significance Criteria

The criteria to determine significant traffic impacts is shown in *Table 3.* In general, if project only traffic causes the thresholds in the table to be exceeded, the impacts are determined to be a direct significant impact and if the project together with other cumulative projects causes the thresholds to be exceeded, the impact is determined to be a cumulative significant impact. **Appendix C** contains the County's significance criteria.

The County's 1993 Public Facilities Element contains language which states that new development that "would significantly impact congestion on roads at LOS "E" or "F", either currently or as a result of the project, will be denied unless improvements are scheduled to improve the LOS to D."

The amounts in the table are considered to be noticeable to the average driver.

TABLE 3
SIGNIFICANCE CRITERIA

Street Segments			
Level of Service	**2-Lane Road**	**4-Lane Road**	**6-Lane Road**
LOS E	200 ADT	400 ADT	600 ADT
LOS F	100 ADT	200 ADT	300 ADT

Intersections		
Level of Service	**Signalized**	**Unsignalized**
LOS E	Delay of 2 seconds	20 peak hour trips on a critical movement
LOS F	Delay of 1 second, or 5 peak hour trips on a critical movement	5 peak hour trips on a critical movement

7.0 Traffic Analysis Methodology

The study considers potential impacts to intersections and street segments adjacent to and near the project site.

The following progressive traffic analysis scenarios are assessed in this report:

- Existing
- Existing + Project
- Existing + Project + Cumulative Projects

This traffic study contains an analysis of intersections and street segments in the project area. The following describes the analysis methodologies.

7.1 Signalized Intersections

Signalized intersections were analyzed using the HCM-based signalized intersection method under AM and PM peak hour conditions. Average vehicle delay was determined utilizing the methodology found in Chapter 16 of the *2000 Highway Capacity Manual (HCM),* with the assistance of the *Traffix* (version 7.5) computer software. The delay values (represented in seconds) were qualified with a corresponding intersection LOS. **Appendix D** contains the intersection analysis worksheets for the existing conditions.

7.2 Caltrans ILV Intersections

Caltrans prefers the Intersecting Lane Volume (ILV) methodology for signalized intersections. The ILV sums the critical intersecting lane volumes and compares this value to a threshold capacity. The intersections of Los Coches Road/I-8 Westbound Ramps and Los Coches Road/I-8 Eastbound Ramps were included in this analysis. **Appendix E** contains the ILV analysis sheets.

7.3 Unsignalized Intersections

Unsignalized intersections were analyzed under morning and afternoon peak hour conditions. Average vehicle delay and Levels of Service (LOS) was determined based upon the procedures found in Chapter 10 of the *2000 Highway Capacity Manual (HCM),* with the assistance of the *Traffix* (version 7.5) computer software.

7.4 Street Segments

The Street segment analysis is based upon the comparison of daily traffic volumes (ADTs) to the County of San Diego's *Standard Street Classification Table*. This table provides segment capacities for different street classifications, and based on traffic volumes and roadway characteristics, projects a level of service for the road segment. The County of San Diego's *Standard Street Classification Table* is attached in **Appendix F**.

8.0 Analysis

8.1 Existing Conditions

Table 4 shows the existing operations at the key intersections in the project area. As shown in Table 4, all key intersections are calculated to currently operate at LOS D or better during the AM and PM peak hours.

Table 4a shows under existing conditions, the I-8/Los Coches Road interchange is calculated to operate Under Capacity during both the AM and PM peak hours.

Table 5 shows a summary of the existing street segment operations in the project area. As shown in Table 5, the street segments are calculated to currently operate at LOS D or better on a daily basis.

8.2 Existing + Project Conditions

Table 4 shows that with the addition of project traffic, the key intersections in the project area are calculated to continue to operate at LOS D or better during the AM and PM peak hours.

Table 4a shows that with the addition of project traffic, the I-8/Los Coches Road interchange is calculated to continue to operate at Under Capacity during both the AM and PM peak hours.

Table 5 shows that with the addition of project traffic, the key street segments are calculated to continue to operate at LOS D or better conditions on a daily basis, with the exception of the following segment, which is calculated to operate at LOS E on a daily basis.

- Business Route 8: Aurora Drive to Los Coches Road.

8.3 Existing + Project + Cumulative Project Conditions

Table 4 shows that with the addition of cumulative project traffic, the key intersections are calculated to operate at LOS D or better conditions during both the AM and PM peak hours with the exception of the following:

- Los Coches Road / Business Route 8 – (LOS E - AM / PM peak hour)

Table 4a shows that with the addition of cumulative project traffic, the I-8/Los Coches Road westbound ramps intersection is calculated to operate at Under Capacity during both the AM and PM peak hours. The I-8/Los Coches Road Eastbound Ramps intersection is calculated to continue to operate at Under Capacity during the AM and Near Capacity during the PM peak hour.

Table 5 shows that with the addition of cumulative project traffic, the following segments are calculated to degrade to LOS E conditions on a daily basis:

- Los Coches Road: Woodside Avenue to Julian Avenue
- Los Coches Road: Julian Avenue to Business Route 8
- Business Route 8: Aurora Drive to Los Coches Road.

TABLE 4
INTERSECTION OPERATIONS

Intersection	Control Type	Peak Hour	Existing		Existing + Project		Δ[c]	Existing + Project + Cumulative Projects		Impact Type
			Delay[a]	LOS[b]	Delay	LOS		Delay	LOS	
Los Coches Road / Business Route 8	SIGNAL	AM	38.2	D	38.3	D	0.1	**59.0**	**E**	Cuml.
		PM	44.0	D	44.2	D	0.2	**57.0**	**F**	
Los Coches Road / I-8 Westbound Ramps	SIGNAL	AM	23.7	C	23.7	C	0.0	45.8	D	None
		PM	30.3	C	30.4	C	0.1	39.6	D	
Los Coches Road / I-8 Eastbound Ramps	SIGNAL	AM	21.5	C	21.5	C	0.0	22.2	C	None
		PM	26.1	C	26.1	C	0.0	29.7	C	
Business Route 8 / Street A	TWSC	AM	DNE	DNE	18.7	C	-	21.2	C	None
		PM	DNE	DNE	17.0	C	-	21.1	C	

Footnotes:

a. Average delay expressed in seconds per vehicle.
b. Level of Service.
c. Δ Increase in delay due to project.
d. LOS and delay with mitigation.

Cuml. – represents a cumulative impact.
Shading and Bold Typeface represents a significant impact.

SIGNALIZED		UNSIGNALIZED	
DELAY/LOS THRESHOLDS		DELAY/LOS THRESHOLDS	
Delay	LOS	Delay	LOS
0.0 < 10.0	A	0.0 < 10.0	A
10.1 to 20.0	B	10.1 to 15.0	B
20.1 to 35.0	C	15.1 to 25.0	C
35.1 to 55.0	D	25.1 to 35.0	D
55.1 to 80.0	E	35.1 to 50.0	E
> 80.1	F	> 50.1	F

Table 4a
Signalized Intersection Operations
ILV Methodology

Intersection	Peak Hour	Existing		Existing + Project		Existing + Project + Cumulative Projects	
		ILV[1]	STATUS	ILV	STATUS	ILV	STATUS
I-8/Los Coches Road WB Ramps	AM	1,004	UNDER	1,006	UNDER	1,132	UNDER
	PM	847	UNDER	849	UNDER	1,018	UNDER
I-8/Los Coches Road EB Ramps	AM	550	UNDER	551	UNDER	667	UNDER
	PM	1,136	UNDER	1,137	UNDER	1,256	NEAR

SOURCE: Caltrans

Notes:

1. ILV – Intersection Lane Volume

STATUS

≤ 1,200 ILV/HR	UNDER CAPACITY
>1,200 but ≤ 1,500 ILV/HR	NEAR CAPACITY
> 1,500 ILV/HR	OVER CAPACITY

TABLE 5
SEGMENT OPERATIONS

Street Segment	Existing Capacity	Existing			Existing + Project			Δ[f]	Existing + Project + Cumulative Projects			Impact Type
	(LOS E) [b]	ADT[c]	V/C[d]	LOS[e]	ADT	V/C	LOS		ADT	V/C	LOS	
Woodside Avenue												
West of Los Coches Road	37,000	16,900	0.46	B	16,930	0.46	B	30	18,030	0.49	B	None
Maine Avenue												
North of Woodside Avenue	16,200	7,500	0.46	D	7,505	0.46	D	5	8,305	0.51	D	None
Los Coches Road												
Woodside Avenue to Julian Avenue	19,000	11,200	0.59	D	11,235	0.59	D	35	**13,535**	**0.71**	**E**	Cumulative
Julian Avenue to Business Route 8	19,000	12,100	0.64	D	12,135	0.64	D	35	**14,735**	**0.78**	**E**	Cumulative
Business Route 8 to I-8	34,200	20,100	0.59	B	20,150	0.59	B	50	21,580	0.63	B	None
Business Route 8												
Aurora Drive to Los Coches Road	16,200	10,800	0.670	D	10,905	0.673	E	105	**12,775**	**0.79**	**E**	Cumulative
East of Los Coches Road	16,200	9,600	0.593	D	9,620	0.594	D	20	9,720	0.60	D	None

Footnotes:

a. Roadway operations based on County of San Diego Roadway Standards (Appendix F).
b. Existing roadway capacities.
c. Average Daily Traffic
d. Volume to Capacity ratio
e. Level of Service
f. Δ denotes the increase in project traffic.

Shading and Bold Typeface represents a significant impact.

9.0 Significance of Impacts/Mitigation Measures

The following is a description of the calculated significant impacts for the project based on the established Significance Criteria along with recommendations for mitigation measures at the impacted locations.

9.1 Significant Impacts

The following key intersections and street segments were determined to directly cumulatively impacted by the project using the significance criteria described in Section 6.0 and based on the results of Table 4 and Table 5.

9.1.1 Direct Impacts

None

9.1.2 Cumulative Impacts

a. Los Coches Road / Business Route 8 intersection
b. Los Coches Road segment: between Woodside Avenue and Julian Avenue
c. Los Coches Road segment: between Julian Avenue and Business Route 8
d. Business Route 8 segment: between Aurora Drive and Los Coches Road.

9.1.3 Access-Related Impacts

e. Access related impacts would occur if adequate access to the project site is not provided.

9.2 Mitigation Measures

The following measures are recommended to mitigate the significant impacts:

a-d. The County of San Diego has developed an overall programmatic solution that addresses existing and projected future road deficiencies in the unincorporated portion of San Diego County. This program includes the adoption of a Transportation Impact Fee (TIF) program to fund improvements to roadways necessary to mitigate potential cumulative impacts caused by traffic from future development. Based on SANDAG regional growth and land use forecasts, the SANDAG Regional Transportation Model was utilized to analyze projected buildout (Year 2030) development conditions on the existing circulation element roadway network throughout the unincorporated area of the County. Based on the results of the traffic modeling, funding necessary to construct transportation facilities that will mitigate cumulative impacts from new development was identified. Existing roadway deficiencies will be corrected through improvement projects funded by other public funding sources, such as TransNet, gas tax, and grants. Potential cumulative impacts to the region's freeways have been addressed in SANDAG's Regional Transportation Plan (RTP). This plan, which considers freeway buildout over the next 30 years, will use funds from TransNet, state, and federal funding to improve freeways to projected level of service objectives in the RTP.

The proposed project generates 140 ADT. These trips will be distributed on circulation element roadways in the County that were analyzed by the TIF program, some of which currently or are projected to operate at inadequate levels of service. These project trips contribute to a potential significant cumulative impact and mitigation is required. The potential growth represented by this project was included in the growth projections upon which the TIF program is based. Therefore, payment of the TIF, which will be required at issuance of building permits, in combination with other components of the program described above, will mitigate potential cumulative traffic impacts to less than significant.

The Los Coches Road/Maine Avenue Capital Improvement Plan (CIP) is not on the County's current CIP list for 2006.

e. The TM 5306 and TM 5423 projects were conditioned as follows:

Provide frontage improvements along Business Route 8 to County 4-Lane Major standards. Provide an eastbound left-turn pocket lane and a westbound right-turn lane on Business Route 8 at the project access point. In addition, provide adequate sight distance at the Business Route 8/Project Access Point intersection, which meets County of San Diego standards.

The following mitigation is recommended for the S04-009 project, which is identical to TM 5306 and TM 5423 except that a westbound right-turn lane is not warranted since the total forecasted peak hour volume is only 7 trips.

The location of the project's driveway is located approximately 350 feet west of Pioneer Trail Parkway, which is to serve both the TM 5306 and TM 5423 subdivisions. Based on the County of San Diego's Public Road standards, non-circulation element roads entering into a circulation element road shall have their centerlines separated by at least 300 feet. Therefore, the distance between both driveways is adequate.